

### Amendments to the Claims

1. (Currently amended) A network monitoring system for monitoring the packet delivery performance of a packet-based network, the network monitoring system comprising:

a first gateway device;

a second gateway device in communication with the first gateway device, wherein the first gateway device and the second gateway device communicate by transmitting a sequence of digital packets[.,,]; and

a monitoring device associated with the first and second gateway devices,

wherein the second gateway device further ~~comprising~~ comprises:

a control protocol process generating packet delivery performance statistics that are indicative of performance of packet delivery between the second gateway device and the first gateway device;

a network monitoring process for collecting the generated packet delivery performance statistics ~~between the first gateway device and the second gateway device;~~ and

a database for storing the collected packet delivery performance statistics, the database being organized according to gateway device pairs; and

a reporting process for sending the stored packet delivery performance statistics to the monitoring device.

2. (Previously presented) The system of claim 1 wherein a view of network performance is measured by compiling packet performance statistics between the first and second gateway devices.

3. (Previously presented) The system of claim 1 wherein the control protocol process generating packet delivery performance statistics utilizes RTCP.

4. (Previously presented) The system of claim 1 wherein the sequence of digital packets includes real-time voice and audio information.

5. (Previously presented) The system of claim 1 further comprising a plurality of gateways generating network performance data; wherein the gateways are organized according to a hierarchical network organization structure to facilitate the organization of network performance data.

6. (Previously presented) The system of claim 5 wherein the network hierarchy comprises organizing individual gateway devices into groups for the purposes of collecting network packet delivery performance information according to the network hierarchy.

7. (Previously presented) The system of claim 1 wherein the packet delivery performance statistics comprise jitter and packet loss statistics.

8. (Previously presented) The system of claim 1 wherein the packet delivery performance statistics comprises round-trip delay statistics.

9. (Previously presented) The system of claim 1 wherein the network monitoring system comprises alarm processing for detecting when packet delivery performance statistics exceed alarm thresholds.

10. (Previously presented) The system of claim 1 wherein the network monitoring system comprises long term monitoring of packet delivery performance statistics.

11-15 (canceled).

16. (Currently amended) A method for monitoring the performance of a network system comprising:

generating packet delivery statistics for packets from a first gateway device to a second gateway device;

compiling the generated packet delivery statistics ~~generated from the first gateway device to the second gateway device at a monitor gateway at the second gateway device;~~ and

sending the compiled packet delivery statistics to a monitor device associated with the first and second gateway devices; and

monitoring the packet delivery statistics at the monitor gateway device to determine the packet delivery performance between the first gateway device and the second gateway device.

17. (Currently amended) The method of claim 16 wherein ~~the step of~~ generating packet delivery statistics ~~is generated~~ generating packet delivery statistics according to the RTCP protocol.

18. (Currently amended) The method of claim 16 wherein ~~the step of~~ compiling the ~~network generated packet delivery statistics is performed with~~ comprises compiling the generated packet delivery statistics in a database[[]], wherein the database organizes organizing the generated packet delivery performance according to pairs of gateways.

19. (Currently amended) The method of claim 16 wherein ~~the step of~~ monitoring the packet delivery statistics ~~is performed at~~ comprises monitoring the packet delivery statistics on various time scales.

20. (Currently amended) The method of claim 19 wherein ~~the step of~~ monitoring is ~~performed~~ monitoring the packet delivery statistics on various time scales comprises monitoring the packet delivery statistics on a time scale appropriate to real-time monitoring of call sessions.

21. (Currently amended) The method of claim 19 wherein ~~the step of~~ monitoring is ~~performed~~ monitoring the packet delivery statistics on various time scales comprises monitoring the packet delivery statistics on a time scale appropriate to near real-time monitoring to provide current network conditions.

22. (Currently amended) The method of claim 19 ~~wherein the step of~~ monitoring is ~~performed~~ monitoring the packet delivery statistics on various time scales comprises monitoring the packet delivery statistics on a time scale appropriate to long-term trend analysis.